

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A detector arrangement for the conversion of electromagnetic radiation into electrical signals, which arrangement includes sensitive areas, each of which corresponds to a respective electrical signal, ~~it being arranged that~~ wherein at least two of the sensitive areas mesh with one another by interleaving positioning a portion of one of the sensitive areas in a fully enclosed free area of another one of the sensitive areas.
2. (Currently Amended) A detector arrangement as claimed in claim 1, wherein at least two a portion of the meshing of the sensitive areas mesh with one another is by at least one of interleaving and dentation.
3. (Previously presented) A detector arrangement as claimed in claim 1, wherein sampling properties of the sensitive areas are defined by a respective associated sensitive surface and that meshing is realized by way of the sensitive surfaces.
4. (Previously presented) A detector arrangement as claimed in claim 1, wherein the sensitive areas are formed by at least one of photodiodes or electrodes.
5. (Currently Amended) A detector arrangement as claimed in claim 1, wherein at least a portion of each the sensitive areas overlaps a portion of another sensitive area ~~are all of the same size.~~
6. (Previously presented) A detector arrangement as claimed in claim 1, wherein the shape of the sensitive areas varies.

7. (Previously Presented) An imaging X-ray system which includes a detector arrangement as claimed in claim 1.

8. (Currently Amended) A method for the conversion of electromagnetic radiation into electrical signals, which method comprises:

emission of electromagnetic radiation by a radiation source,

detection of the electromagnetic radiation by means of a detector arrangement which includes sensitive areas,

conversion of the electromagnetic radiation into electrical signals, where each time one of the sensitive areas corresponds unambiguously to a respective electrical signal, and at least two of the sensitive areas mesh with one another by positioning a portion of one of the sensitive areas in a fully enclosed free area of another one of the sensitive areas interleaving, and

propagation of the electrical signals.

9. (Currently Amended) The ~~detector arrangement~~ method of claim 8, wherein the at least two of the sensitive areas that mesh with one another ~~by interleaving~~ are connected to each other along a non-surface portion of the detector arrangement.

10. (Currently Amended) The detector arrangement of claim 1, wherein at least a portion of each the sensitive areas overlaps a portion of another sensitive area ~~the shape of the sensitive areas is the same.~~

11. (Previously presented) The detector arrangement of claim 1, wherein all of the sensitive areas mesh with one another by interleaving.

12. (Previously presented) The detector arrangement of claim 1, wherein each of the sensitive areas is symmetrical.

13. (Cancelled).

14. (Currently Amended) The method of claim 8, wherein the at least two of the sensitive areas that mesh with one another ~~by interleaving~~ are connected to each other along a non-surface portion of the detector arrangement.

15. (Previously presented) The method of claim 8, wherein the shape of the sensitive areas is the same.

16. (Previously presented) The method of claim 8, wherein all of the sensitive areas mesh with one another by interleaving.

17. (Previously presented) The method of claim 8, wherein each of the sensitive areas is symmetrical.

18. (Cancelled)